

I claim:

1. A communication system, comprising:

a plurality of transceivers;

a communication bus connected to said plurality of said transceivers to enable transmission of communication information between individual ones of said plurality of said transceivers;

said communication bus having a ring-shaped structure connecting each one of said plurality of said transceivers to a respective one of said plurality of said transceivers that is adjacent in a clockwise direction, defined as a respective clockwise adjacent transceiver, and to a respective one of said plurality of said transceivers that is adjacent in a counterclockwise direction, defined as a respective counterclockwise adjacent transceiver;

said communication bus having a plurality of bus sections defining a plurality of first bus sections and a plurality of second bus sections;

each one of said plurality of said transceivers being connected to said respective clockwise adjacent transceiver via a respective one of plurality of said first bus sections;

each one of said plurality of said transceivers being connected to said respective counterclockwise adjacent transceiver via a respective one of said plurality of said second bus sections;

each one of said plurality of said transceivers including a first receiver and a first transmitter that are associated with a respective one of said plurality of said first bus sections;

each one of said plurality of said transceivers including a second receiver and a second transmitter that are associated with a respective one of said plurality of said second bus sections;

each one of said plurality of said transceivers including a control device for controlling said first receiver of said one of said plurality of said transceivers, said second receiver of said one of said plurality of said transceivers, said first transmitter of said one of said plurality of said transceivers, and said second transmitter of said one of said plurality of said transceivers;

said control device being constructed to activate said first transmitter for transmitting first ones of the communication

information in the clockwise direction via said communication bus; and

said control device being constructed to activate said second transmitter for transmitting second ones of the communication information in the counterclockwise direction via said communication bus.

2. The communication system according to claim (1, wherein said control device of each one of said plurality of said transceivers is constructed such that, when the first ones of the communication information and the second ones of the communication information are not being transmitted by the one of said plurality of said transceivers, said control device activates said first receiver and said second receiver.

3. The communication system according to claim (2, wherein said control device of each one of said plurality of said transceivers is constructed such that, when ones of the communication information not intended for said one of said plurality of said transceivers is received by a receiver selected from the group consisting of said first receiver and said second receiver, said control device activates a transmitter selected from the group consisting of said first transmitter and said second transmitter.

4. The communication system according to claim 2, wherein:

said control device of each one of said plurality of said transceivers is constructed such that, when a communication information not intended for said one of said plurality of said transceivers is received by a receiver selected from the group consisting of said first receiver and said second receiver, then:

said control device activates a given transmitter, selected from the group consisting of said first transmitter and said second transmitter, only if no communication information is currently being received via one of said plurality of said bus sections associated with said given transmitter.

5. The communication system according to claim 1, wherein each one of said plurality of said transceivers includes a storage device for storing communication information that is defined as stored communication information and that is selected from the group consisting of information to be transmitted and information to be forwarded.

6. The communication system according to claim 1, wherein:

said control device is constructed such that, if ones of the communication information are currently being received via said respective one of said plurality of said first bus sections and if said first transmitter is to be activated, then after a predetermined delay time, the stored communication information is read out from said storage device and is attempted to be forwarded via said respective one of said plurality of said first bus sections; and

said control device is constructed such that, if ones of the communication information are currently being received via said respective one of said plurality of said second bus sections and if said second transmitter is to be activated, then after a predetermined delay time, the stored communication information is read out from said storage device and is attempted to be forwarded via said respective one of said plurality of said second bus sections.

7. The communication system according to claim 1, wherein said control device is constructed such that, when an operation is being performed that is selected from the group consisting of transmitting the communication information and forwarding the communication information, said control device checks for an error and if the error is found, said control device, after a given delay time, causes an operation to be performed that is selected from the group consisting of

retransmitting the communication information and forwarding the communication information via a transmitter that is selected from the group consisting of said first transmitter and said second transmitter.

8. The communication system according to claim 7, wherein:

said control device of each one of said plurality of said transceivers is constructed to identify retransmitted communication information; and

said control device of each one of said plurality of said transceivers is constructed such that:

when ones of the communication information, which are not intended for said one of said plurality of said transceivers and which have been identified as being retransmitted by said control device of another one of said plurality of said transceivers, are received during forwarding of the ones of the communication information because of an error, said control device of said one of said plurality of said transceivers prevents a retransmission of the ones of the communication information, and

when the ones of the communication information, which are not intended for said one of said plurality of said transceivers and which have been identified as being retransmitted by said control device of another one of said plurality of said transceivers, are received when a bus section, selected from the group consisting of an occupied one of said plurality of said first bus sections and an occupied one of said plurality of said second bus sections, via which the ones of the communication information are to be forwarded, said control device of said one of said plurality of said transceivers prevents a retransmission of the ones of the communication information.

9. The communication system according to claim 1, wherein:

each one of said plurality of said transceivers includes a storage device for storing communication information that is defined as stored communication information and that is selected from the group consisting of information to be transmitted and information to be forwarded;

for each one of the communication information to be transmitted, a particular one of said plurality of said transceivers is defined as switching unit;

11. The communication system according to claim 9, wherein:

said control device of said switching unit is constructed such that, if within the predetermined period of time, the corresponding ones of the communication information have been received only via a bus section selected from the group consisting of one of said plurality of said first bus sections and one of said plurality of said second bus sections, said control device of said switching unit only reads out of said storage means and forwards the corresponding ones of the communication information.

12. The communication system according to claim 1, wherein:

said communication bus includes a first communication channel for exclusively transmitting the communication information in the clockwise direction; and

said communication bus includes a second communication channel for exclusively transmitting the communication information in the counterclockwise direction.

13. The communication system according to claim 12, wherein:

said first receiver of each one of said plurality of said transceivers has an input connected to said second communication channel of said plurality of said first bus sections;

said second receiver of each one of said plurality of said transceivers has an input connected to said first communication channel of said plurality of said second bus sections;

said first transmitter of each one of said plurality of said transceivers has an output connected to said first communication channel of said plurality of said first bus sections; and

said second transmitter of each one of said plurality of said transceivers has an output connected to said second communication channel of said plurality of said second bus sections.

14. The communication system according to claim 12, wherein:

said control device is constructed to activate said first transmitter to transmit the first ones of the communication information in the clockwise direction via said first communication channel; and

said control device is constructed to activate said second transmitter to transmit the second ones of the communication information in the counterclockwise direction via said second communication channel.

15. A communication system, comprising:

a plurality of transceivers;

a communication bus connected to said plurality of said transceivers to enable transmission of communication information between individual ones of said plurality of said transceivers;

said communication bus having a ring-shaped structure connecting each one of said plurality of said transceivers to a respective one of said plurality of said transceivers that is adjacent in a clockwise direction, defined as a respective clockwise adjacent transceiver, and to a respective one of said plurality of said transceivers that is adjacent in a counterclockwise direction, defined as a respective counterclockwise adjacent transceiver;

said communication bus having a plurality of bus sections defining a plurality of first bus sections and a plurality of second bus sections;

each one of said plurality of said transceivers being connected to said respective clockwise adjacent transceiver via a respective one of plurality of said first bus sections;

each one of said plurality of said transceivers being connected to said respective counterclockwise adjacent transceiver via a respective one of said plurality of said second bus sections;

each one of said plurality of said transceivers including a first receiver and a first transmitter that are associated with a respective one of said plurality of said first bus sections;

each one of said plurality of said transceivers including a second receiver and a second transmitter that are associated with a respective one of said plurality of said second bus sections;

each one of said plurality of said transceivers including a control device for controlling said first receiver of said one of said plurality of said transceivers, said second receiver

of said one of said plurality of said transceivers, said first transmitter of said one of said plurality of said transceivers, and said second transmitter of said one of said plurality of said transceivers; and

each one of said plurality of said transceivers including a storage device for storing stored communication information selected from the group consisting of information to be transmitted to another one of said plurality of said transceivers and information to be forwarded to another one of said plurality of said transceivers.

16. The communication system according to claim 15, wherein said control device of each one of said plurality of said transceivers is constructed such that, when the communication information is not being transmitted by the one of said plurality of said transceivers, said control device activates said first receiver and said second receiver.

17. The communication system according to claim 15, wherein said control device of each one of said plurality of said transceivers is constructed such that, when ones of the communication information not intended for said one of said plurality of said transceivers is received by a receiver selected from the group consisting of said first receiver and said second receiver, said control device forwards the ones of

the communication information by activating a transmitter selected from the group consisting of said first transmitter and said second transmitter.

18. The communication system according to claim 15, wherein:

said control device is constructed to activate said first transmitter to transmit given ones of the communication information in the clockwise direction via said communication bus; and

said control device is constructed to activate said second transmitter to transmit the given ones of the communication information in the counterclockwise direction via said communication bus.

19. The communication system according to claim 15, wherein:

said control device is constructed to activate said first transmitter to transmit first ones of the communication information in the clockwise direction via said communication bus; and

said control device is constructed to activate said second transmitter to transmit second ones of the communication

information in the counterclockwise direction via said communication bus.

20. The communication system according to claim 15, wherein:

said control device of each one of said plurality of said transceivers is constructed such that, when a communication information not intended for said one of said plurality of said transceivers is received by a receiver selected from the group consisting of said first receiver and said second receiver, then:

said control device activates a given transmitter, selected from the group consisting of said first transmitter and said second transmitter, only if no communication information is currently being received via one of said plurality of said bus sections associated with said given transmitter.

21. The communication system according to claim 15, wherein:

said control device is constructed such that, if ones of the communication information are currently being received via said respective one of said plurality of said first bus sections and if said first transmitter is to be activated, then after a predetermined delay time, the stored

communication information is read out from said storage device and is attempted to be forwarded via said respective one of said plurality of said first bus sections; and

said control device is constructed such that, if ones of the communication information are currently being received via said respective one of said plurality of said second bus sections and if said second transmitter is to be activated, then after a predetermined delay time, the stored communication information is read out from said storage device and is attempted to be forwarded via said respective one of said plurality of said second bus sections.

22. The communication system according to claim 15, wherein said control device is constructed such that, when an operation is being performed that is selected from the group consisting of transmitting the communication information and forwarding the communication information, said control device checks for an error and if the error is found, said control device, after a given delay time, causes an operation to be performed that is selected from the group consisting of retransmitting the stored communication information and forwarding the stored communication information via a transmitter that is selected from the group consisting of said first transmitter and said second transmitter.

23. The communication system according to claim 22, wherein:

said control device of each one of said plurality of said transceivers is constructed to identify retransmitted communication information; and

said control device of each one of said plurality of said transceivers is constructed such that:

when ones of the communication information, which are not intended for said one of said plurality of said transceivers and which have been identified as being retransmitted by said control device of another one of said plurality of said transceivers, are received during forwarding of the ones of the communication information because of an error, said control device of said one of said plurality of said transceivers prevents a retransmission of the ones of the communication information, and

when the ones of the communication information, which are not intended for said one of said plurality of said transceivers and which have been identified as being retransmitted by said control device of another one of said plurality of said transceivers, are received when a bus section, selected from the group consisting of an

occupied one of said plurality of said first bus sections and an occupied one of said plurality of said second bus sections, via which the ones of the communication information are to be forwarded, said control device of said one of said plurality of said transceivers prevents a retransmission of the ones of the communication information.

24. The communication system according to claim 15, wherein:

each one of said plurality of said transceivers includes a storage device for storing communication information that is defined as stored communication information and that is selected from the group consisting of information to be transmitted and information to be forwarded;

for each one of the communication information to be transmitted, a particular one of said plurality of said transceivers is defined as switching unit;

said control device of said switching unit is constructed such that, when corresponding ones of the communication information are received via a corresponding bus section selected from the group consisting of one of said plurality of said first bus sections and one of said plurality of said second bus sections, said control device of said switching unit

temporarily stores the ones of the communication information in said storage means of said switching unit and forwards the ones of the communication information via another corresponding bus section selected from the group consisting of one of said plurality of said first bus sections and one of said plurality of said second bus sections, after a predetermined period of time has elapsed.

25. The communication system according to claim 24, wherein:

said control device of said switching unit is constructed such that, if within the predetermined period of time, the corresponding ones of the communication information have been received both via one of said plurality of said first bus sections and one of said plurality of said second bus sections, said control device of said switching unit temporarily stores the corresponding ones of the communication information and after the predetermined period of time has elapsed, said control device of said switching unit forwards the corresponding ones of the communication information.

26. The communication system according to claim 24, wherein:

said control device of said switching unit is constructed such that, if within the predetermined period of time, the corresponding ones of the communication information have been

received only via a bus section selected from the group consisting of one of said plurality of said first bus sections and one of said plurality of said second bus sections, said control device of said switching unit only reads out of said storage means and forwards the corresponding ones of the communication information.

27. The communication system according to claim 15, wherein:

said communication bus includes a first communication channel for exclusively transmitting the communication information in the clockwise direction; and

said communication bus includes a second communication channel for exclusively transmitting the communication information in the counterclockwise direction.

28. The communication system according to claim 27, wherein:

said first receiver of each one of said plurality of said transceivers has an input connected to said second communication channel of said plurality of said first bus sections;

said second receiver of each one of said plurality of said transceivers has an input connected to said first

communication channel of said plurality of said second bus sections;

said first transmitter of each one of said plurality of said transceivers has an output connected to said first communication channel of said plurality of said first bus sections; and

said second transmitter of each one of said plurality of said transceivers has an output connected to said second communication channel of said plurality of said second bus sections.

29. The communication system according to claim 27, wherein:

said control device is constructed to activate said first transmitter to transmit given ones of the communication information in the clockwise direction via said first communication channel; and

said control device is constructed to activate said second transmitter to transmit the given ones of the communication information in the counterclockwise direction via said second communication channel.

30. The communication system according to claim 27, wherein:

said control device is constructed to activate said first transmitter to transmit first ones of the communication information in the clockwise direction via said first communication channel; and

said control device is constructed to activate said second transmitter to transmit second ones of the communication information in the counterclockwise direction via said second communication channel.

31. A communication system, comprising:

a plurality of transceivers;

a communication bus connected to said plurality of said transceivers to enable transmission of communication information between individual ones of said plurality of said transceivers;

said communication bus having a ring-shaped structure connecting each one of said plurality of said transceivers to a respective one of said plurality of said transceivers that is adjacent in a clockwise direction, defined as a respective clockwise adjacent transceiver, and to a respective one of said plurality of said transceivers that is adjacent in a

counterclockwise direction, defined as a respective
counterclockwise adjacent transceiver;

said communication bus having a plurality of bus sections
defining a plurality of first bus sections and a plurality of
second bus sections;

each one of said plurality of said transceivers being
connected to said respective clockwise adjacent transceiver
via a respective one of plurality of said first bus sections;

each one of said plurality of said transceivers being
connected to said respective counterclockwise adjacent
transceiver via a respective one of said plurality of said
second bus sections;

each one of said plurality of said transceivers including a
first receiver and a first transmitter that are associated
with a respective one of said plurality of said first bus
sections;

each one of said plurality of said transceivers including a
second receiver and a second transmitter that are associated
with a respective one of said plurality of said second bus
sections;

each one of said plurality of said transceivers including a control device for controlling said first receiver of said one of said plurality of said transceivers, said second receiver of said one of said plurality of said transceivers, said first transmitter of said one of said plurality of said transceivers, and said second transmitter of said one of said plurality of said transceivers;

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said control device being constructed such that, when an operation is being performed that is selected from the group consisting of transmitting the communication information and forwarding the communication information, said control device checks for an error and if the error is found, said control device, after a given delay time, causes an operation to be performed that is selected from the group consisting of retransmitting the communication information and forwarding the communication information via a transmitter that is selected from the group consisting of said first transmitter and said second transmitter.

32. The communication system according to claim 31, wherein said control device of each one of said plurality of said transceivers is constructed such that, when the communication information is not being transmitted by the one of said plurality of said transceivers, said control device activates said first receiver and said second receiver.

33. The communication system according to claim 31, wherein said control device of each one of said plurality of said transceivers is constructed such that, when ones of the communication information not intended for said one of said plurality of said transceivers is received by a receiver selected from the group consisting of said first receiver and said second receiver, said control device forwards the ones of the communication information by activating a transmitter selected from the group consisting of said first transmitter and said second transmitter.

34. The communication system according to claim 31, wherein:

said control device is constructed to activate said first transmitter to transmit given ones of the communication information in the clockwise direction via said communication bus; and

said control device is constructed to activate said second transmitter to transmit the given ones of the communication information in the counterclockwise direction via said communication bus.

35. The communication system according to claim 31, wherein:

said control device is constructed to activate said first transmitter to transmit first ones of the communication information in the clockwise direction via said communication bus; and

said control device is constructed to activate said second transmitter to transmit second ones of the communication information in the counterclockwise direction via said communication bus.

36. The communication system according to claim 31, wherein:

said control device of each one of said plurality of said transceivers is constructed such that, when a communication information not intended for said one of said plurality of said transceivers is received by a receiver selected from the group consisting of said first receiver and said second receiver, then:

said control device activates a given transmitter, selected from the group consisting of said first transmitter and said second transmitter, only if no communication information is currently being received via one of said plurality of said bus sections associated with said given transmitter.

37. The communication system according to claim 31, wherein each one of said plurality of said transceivers includes a storage device for storing communication information that is defined as stored communication information and that is selected from the group consisting of information to be transmitted and information to be forwarded.

38. The communication system according to claim 37, wherein:

said control device is constructed such that, if ones of the communication information are currently being received via said respective one of said plurality of said first bus sections and if said first transmitter is to be activated, then after a predetermined delay time, the stored communication information is read out from said storage device and is attempted to be forwarded via said respective one of said plurality of said first bus sections; and

said control device is constructed such that, if ones of the communication information are currently being received via said respective one of said plurality of said second bus sections and if said second transmitter is to be activated, then after a predetermined delay time, the stored communication information is read out from said storage device and is attempted to be forwarded via said respective one of said plurality of said second bus sections.

39. The communication system according to claim 31, wherein:

said control device of each one of said plurality of said transceivers is constructed to identify retransmitted communication information; and

said control device of each one of said plurality of said transceivers is constructed such that:

when ones of the communication information, which are not intended for said one of said plurality of said transceivers and which have been identified as being retransmitted by said control device of another one of said plurality of said transceivers, are received during forwarding of the ones of the communication information because of an error, said control device of said one of said plurality of said transceivers prevents a retransmission of the ones of the communication information, and

when the ones of the communication information, which are not intended for said one of said plurality of said transceivers and which have been identified as being retransmitted by said control device of another one of said plurality of said transceivers, are received when a

bus section, selected from the group consisting of an occupied one of said plurality of said first bus sections and an occupied one of said plurality of said second bus sections, via which the ones of the communication information are to be forwarded, said control device of said one of said plurality of said transceivers prevents a retransmission of the ones of the communication information.

40. The communication system according to claim 31, wherein:

each one of said plurality of said transceivers includes a storage device for storing communication information that is defined as stored communication information and that is selected from the group consisting of information to be transmitted and information to be forwarded;

for each one of the communication information to be transmitted, a particular one of said plurality of said transceivers is defined as switching unit;

said control device of said switching unit is constructed such that, when corresponding ones of the communication information are received via a corresponding bus section selected from the group consisting of one of said plurality of said first bus sections and one of said plurality of said second bus

sections, said control device of said switching unit temporarily stores the ones of the communication information in said storage means of said switching unit and forwards the ones of the communication information via another corresponding bus section selected from the group consisting of one of said plurality of said first bus sections and one of said plurality of said second bus sections, after a predetermined period of time has elapsed.

41. The communication system according to claim 40, wherein:

said control device of said switching unit is constructed such that, if within the predetermined period of time, the corresponding ones of the communication information have been received both via one of said plurality of said first bus sections and one of said plurality of said second bus sections, said control device of said switching unit temporarily stores the corresponding ones of the communication information and after the predetermined period of time has elapsed, said control device of said switching unit forwards the corresponding ones of the communication information.

42. The communication system according to claim 40, wherein:

said control device of said switching unit is constructed such that, if within the predetermined period of time, the

corresponding ones of the communication information have been received only via a bus section selected from the group consisting of one of said plurality of said first bus sections and one of said plurality of said second bus sections, said control device of said switching unit only reads out of said storage means and forwards the corresponding ones of the communication information.

43. The communication system according to claim 31, wherein:

said communication bus includes a first communication channel for exclusively transmitting the communication information in the clockwise direction; and

said communication bus includes a second communication channel for exclusively transmitting the communication information in the counterclockwise direction.

44. The communication system according to claim 43, wherein:

said first receiver of each one of said plurality of said transceivers has an input connected to said second communication channel of said plurality of said first bus sections;

said second receiver of each one of said plurality of said transceivers has an input connected to said first communication channel of said plurality of said second bus sections;

said first transmitter of each one of said plurality of said transceivers has an output connected to said first communication channel of said plurality of said first bus sections; and

said second transmitter of each one of said plurality of said transceivers has an output connected to said second communication channel of said plurality of said second bus sections.

45. The communication system according to claim 43, wherein:

said control device is constructed to activate said first transmitter to transmit given ones of the communication information in the clockwise direction via said first communication channel; and

said control device is constructed to activate said second transmitter to transmit the given ones of the communication information in the counterclockwise direction via said second communication channel.

46. The communication system according to claim 43, wherein:

said control device is constructed to activate said first transmitter to transmit first ones of the communication information in the clockwise direction via said first communication channel; and

said control device is constructed to activate said second transmitter to transmit second ones of the communication information in the counterclockwise direction via said second communication channel.

47. A communication system, comprising:

a plurality of transceivers;

a communication bus connected to said plurality of said transceivers to enable transmission of communication information between individual ones of said plurality of said transceivers;

said communication bus having a ring-shaped structure connecting each one of said plurality of said transceivers to a respective one of said plurality of said transceivers that is adjacent in a clockwise direction, defined as a respective

clockwise adjacent transceiver, and to a respective one of said plurality of said transceivers that is adjacent in a counterclockwise direction, defined as a respective counterclockwise adjacent transceiver;

said communication bus having a plurality of bus sections defining a plurality of first bus sections and a plurality of second bus sections;

each one of said plurality of said transceivers being connected to said respective clockwise adjacent transceiver via a respective one of plurality of said first bus sections;

each one of said plurality of said transceivers being connected to said respective counterclockwise adjacent transceiver via a respective one of said plurality of said second bus sections;

each one of said plurality of said transceivers including a first receiver and a first transmitter that are associated with a respective one of said plurality of said first bus sections;

each one of said plurality of said transceivers including a second receiver and a second transmitter that are associated

with a respective one of said plurality of said second bus sections;

each one of said plurality of said transceivers including a control device for controlling said first receiver of said one of said plurality of said transceivers, said second receiver of said one of said plurality of said transceivers, said first transmitter of said one of said plurality of said transceivers, and said second transmitter of said one of said plurality of said transceivers; and

said control device being constructed to identify faulty communication information and to forward the identified faulty communication information.

48. The communication system according to claim 47, wherein said control device of each one of said plurality of said transceivers is constructed such that, when the communication information is not being transmitted by the one of said plurality of said transceivers, said control device activates said first receiver and said second receiver.

49. The communication system according to claim 47, wherein said control device of each one of said plurality of said transceivers is constructed such that, when ones of the communication information not intended for said one of said

plurality of said transceivers is received by a receiver selected from the group consisting of said first receiver and said second receiver, said control device forwards the ones of the communication information by activating a transmitter selected from the group consisting of said first transmitter and said second transmitter.

50. The communication system according to claim 47, wherein:

said control device is constructed to activate said first transmitter to transmit given ones of the communication information in the clockwise direction via said communication bus; and

said control device is constructed to activate said second transmitter to transmit the given ones of the communication information in the counterclockwise direction via said communication bus.

51. The communication system according to claim 47, wherein:

said control device is constructed to activate said first transmitter to transmit first ones of the communication information in the clockwise direction via said communication bus; and

said control device is constructed to activate said second transmitter to transmit second ones of the communication information in the counterclockwise direction via said communication bus.

52. The communication system according to claim 51, wherein:

said control device of each one of said plurality of said transceivers is constructed such that, when a communication information not intended for said one of said plurality of said transceivers is received by a receiver selected from the group consisting of said first receiver and said second receiver, then:

said control device activates a given transmitter, selected from the group consisting of said first transmitter and said second transmitter, only if no communication information is currently being received via one of said plurality of said bus sections associated with said given transmitter.

53. The communication system according to claim 47, wherein each one of said plurality of said transceivers includes a storage device for storing communication information that is defined as stored communication information and that is

selected from the group consisting of information to be transmitted and information to be forwarded.

54. The communication system according to claim 53, wherein:

said control device is constructed such that, if ones of the communication information are currently being received via said respective one of said plurality of said first bus sections and if said first transmitter is to be activated, then after a predetermined delay time, the stored communication information is read out from said storage device and is attempted to be forwarded via said respective one of said plurality of said first bus sections; and

said control device is constructed such that, if ones of the communication information are currently being received via said respective one of said plurality of said second bus sections and if said second transmitter is to be activated, then after a predetermined delay time, the stored communication information is read out from said storage device and is attempted to be forwarded via said respective one of said plurality of said second bus sections.

55. The communication system according to claim 53, wherein said control device is constructed such that, when an operation is being performed that is selected from the group

consisting of transmitting the communication information and forwarding the communication information, said control device checks the communication information for an error and if the error is found, said control device, after a given delay time, causes an operation to be performed that is selected from the group consisting of retransmitting the stored communication information and forwarding the stored communication information via a transmitter that is selected from the group consisting of said first transmitter and said second transmitter.

56. The communication system according to claim 47, wherein:

said control device of each one of said plurality of said transceivers is constructed to identify retransmitted communication information; and

said control device of each one of said plurality of said transceivers is constructed such that:

when ones of the communication information, which are not intended for said one of said plurality of said transceivers and which have been identified as being retransmitted by said control device of another one of said plurality of said transceivers, are received during forwarding of the ones of the communication information

because of an error, said control device of said one of said plurality of said transceivers prevents a retransmission of the ones of the communication information, and

when the ones of the communication information, which are not intended for said one of said plurality of said transceivers and which have been identified as being retransmitted by said control device of another one of said plurality of said transceivers, are received when a bus section, selected from the group consisting of an occupied one of said plurality of said first bus sections and an occupied one of said plurality of said second bus sections, via which the ones of the communication information are to be forwarded, said control device of said one of said plurality of said transceivers prevents a retransmission of the ones of the communication information.

57. The communication system according to claim 47, wherein:

each one of said plurality of said transceivers includes a storage device for storing communication information that is defined as stored communication information and that is selected from the group consisting of information to be transmitted and information to be forwarded;

for each one of the communication information to be transmitted, a particular one of said plurality of said transceivers is defined as switching unit;

said control device of said switching unit is constructed such that, when corresponding ones of the communication information are received via a corresponding bus section selected from the group consisting of one of said plurality of said first bus sections and one of said plurality of said second bus sections, said control device of said switching unit temporarily stores the ones of the communication information in said storage means of said switching unit and forwards the ones of the communication information via another corresponding bus section selected from the group consisting of one of said plurality of said first bus sections and one of said plurality of said second bus sections, after a predetermined period of time has elapsed.

58. The communication system according to claim 57, wherein:

said control device of said switching unit is constructed such that, if within the predetermined period of time, the corresponding ones of the communication information have been received both via one of said plurality of said first bus sections and one of said plurality of said second bus

sections, said control device of said switching unit temporarily stores the corresponding ones of the communication information and after the predetermined period of time has elapsed, said control device of said switching unit forwards the corresponding ones of the communication information.

59. The communication system according to claim 57, wherein:

said control device of said switching unit is constructed such that, if within the predetermined period of time, the corresponding ones of the communication information have been received only via a bus section selected from the group consisting of one of said plurality of said first bus sections and one of said plurality of said second bus sections, said control device of said switching unit only reads out of said storage means and forwards the corresponding ones of the communication information.

60. The communication system according to claim 47, wherein:

said communication bus includes a first communication channel for exclusively transmitting the communication information in the clockwise direction; and

said communication bus includes a second communication channel for exclusively transmitting the communication information in the counterclockwise direction.

61. The communication system according to claim 60, wherein:

said first receiver of each one of said plurality of said transceivers has an input connected to said second communication channel of said plurality of said first bus sections;

said second receiver of each one of said plurality of said transceivers has an input connected to said first communication channel of said plurality of said second bus sections;

said first transmitter of each one of said plurality of said transceivers has an output connected to said first communication channel of said plurality of said first bus sections; and

said second transmitter of each one of said plurality of said transceivers has an output connected to said second communication channel of said plurality of said second bus sections.

62. The communication system according to claim 60, wherein:

said control device is constructed to activate said first transmitter to transmit given ones of the communication information in the clockwise direction via said first communication channel; and

said control device is constructed to activate said second transmitter to transmit the given ones of the communication information in the counterclockwise direction via said second communication channel.

63. The communication system according to claim 60, wherein:

said control device is constructed to activate said first transmitter to transmit first ones of the communication information in the clockwise direction via said first communication channel; and

said control device is constructed to activate said second transmitter to transmit second ones of the communication information in the counterclockwise direction via said second communication channel.